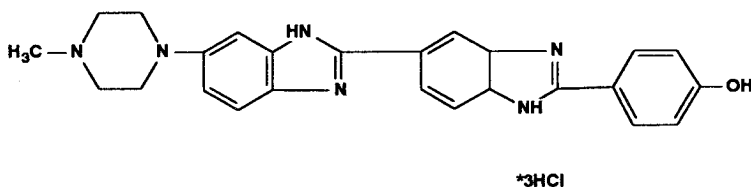


PIBENZIMOL HYDROCHLORIDE

NSC - 322921



Chemical Name:

4-[5-(4-Methyl-1-piperazinyl)-[2,5'-bi-1*H*-benzimidazol]-2'-yl]-phenol, trihydrochloride

Other Names: Bisbenzimidazole

CAS Registry Number: 23491-45-4

Molecular Formula: C₂₅H₂₄N₆O·3HCl

M.W.: 534.9

Approximate Solubility:

(mg/mL)

DMSO

240 - 300

H₂O

≈ 110

95% EtOH

< 1

0.1 N NaOH	14 - 22
0.1 N HCl	43 - 44
CHCl ₃	< 1
Acetone	< 1

Stability:

Bulk:

Under ordinary laboratory illumination, the material slowly decomposes. At the end of four weeks at room temperature in a capped glass vial, 3% decomposition has occurred (HPLC).

In a similar container but maintained at 45 °C and in darkness, the subject sample was stable for at least four weeks (HPLC).

Solution:

A solution of the sample (1 mg/mL) is stable in water for at least 24 hours at room temperature under normal laboratory illumination.

High Performance Liquid Chromatography:

Column:	Dupont Zorbax ODS, 25 cm x 4.6 mm i.d.
Mobile Phase:	0.1 M pH 7.0 KH ₂ PO ₄ /CH ₃ OH, 88/200
Flow Rate:	1.5 mL/min
Detection:	UV at 230 nm
Sample Preparation:	1 mg/mL in H ₂ O

Retention Volume: 10.95 mL (NSC-322921)

Toxicity Data:

Rat(iv): LD₅₀: 32200 µg/kg

National Technical Information Service, PB84-171206

Mouse(iv): LD₅₀: 36900 µg/kg

National Technical Information Service, PB84-171206